



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,417	02/18/2004	Michael A. Betz	P06659US0-5184	6745
34082 7590 06/26/2007 ZARLEY LAW FIRM P.L.C. CAPITAL SQUARE 400 LOCUST, SUITE 200 DES MOINES, IA 50309-2350			EXAMINER LAZO, THOMAS E	
			ART UNIT 3745	PAPER NUMBER
			MAIL DATE 06/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/782,417

Applicant(s)

BETZ ET AL.

Examiner

Thomas E. Lazo

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/18/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/21/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Cozens et al.

(6,533,556). Cozens et al. discloses a roller vane pump 10 for a hydraulic system with an inlet 16a in fluid communication with the hydraulic system, a first outlet 20a,22a in fluid communication with a first hydraulic circuit 26a, a second outlet 20b,22b in fluid communication with a second hydraulic circuit 26b, a second inlet 16b independent of the first inlet 16a, wherein the first and second outlets are independent of each other and the first and second outlets are diametrically opposed to each other.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betz in view of Cozens et al. Betz teaches for a hydraulic system with a hydrostatic pump 12 in fluid communication with the hydraulic system and driven by a driveshaft 12a, a charge pump 26 driven by the driveshaft 12a and having an inlet 28 in fluid communication with the hydraulic system and an outlet 34, a charge circuit 38 in fluid communication with the outlet 34, and an auxiliary circuit 40 in fluid communication with the outlet 34. Betz does not disclose that the charge pump has a first and second outlet independent of each other to communicate with the charge circuit and the auxiliary circuit, respectively, wherein the charge pump is a multiple roller vane pump, the first and second outlets are diametrically opposed to each other, the roller vane pump has a second inlet independent of the first inlet.

Cozens et al. teaches for a pump 10 used in an automotive transmission and that the pump 10 has a first and second outlet independent of each other to communicate with a first circuit 26a and a second circuit 26b, respectively, wherein the pump 10 is a multiple roller vane pump, the first and second outlets are diametrically opposed to each other, the roller vane pump has a second inlet independent of the first inlet for the purposes of controlling energy losses without using complex valving systems. See Cozens et al. col. 1, lines 10-53.

Since Betz and Cozens et al. are both hydraulic systems that supply two independent circuits from a single pump, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the system of Betz, based on the teachings of Cozens et al., to have the charge pump include a first and second outlet independent of each other to communicate with the charge circuit and the auxiliary circuit, respectively, wherein the charge pump is a multiple roller vane pump, the first and second outlets are diametrically

Art Unit: 3745

opposed to each other, the roller vane pump has a second inlet independent of the first inlet for the purposes of controlling energy losses without using complex valving systems.

Prior Art

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consists of seven patents.

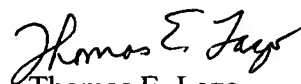
Miyazaki et al., Chung, Kubik, Bristow, Hansen et al., Adams et al., and Muller are cited to show pumps with multiple outlets.

Contact Information

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas Lazo whose telephone number is (571) 272-4818. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Edward Look, can be reached on (571) 272-4820. The fax phone number for this Group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas E. Lazo
Primary Examiner
Art Unit 3745
June 14, 2007